

### **REMARKS**

This is in response to the Office Action mailed June 28, 2006 regarding the subject application. Claims 106-160 are pending in the application.

#### **Section 102 Rejections**

The Examiner has rejected claims 151-154 and 159 under 35 U.S.C. 102(b) as being anticipated by US002154305 (Goerl).

To anticipate a claim, the reference must teach each and every element of a claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Claim 151 recites "a vessel defining a cavity having enclosed sides, a thermally conductive bottom end and a top end forming an opening for the introduction to and extraction from said cavity of contents to be heated, the bottom end having an external bottom side for receiving heat; a top housing having a top rim coupled circumferentially to the external bottom side of said vessel...".

The Examiner has said that the '305 reference "shows a portable heating system comprising a vessel (13) having a thermally conductive bottom end defining an external bottom side (31, 32, 33) of the vessel". The Examiner has thus included not only the surface 31, but also the surfaces 32 and 33 as defining an external bottom side. However, the claim language as recited above qualifies the external bottom side as being defined by a thermally conductive bottom end. Thus, when referring to the vessel 13 of the '305 reference, clearly the surfaces 32 and 33 cannot reasonably be considered to reside at a bottom end of the vessel 13. Accordingly, they can neither be considered to be part of the external bottom side that resides in the bottom end.

Claim 151 also recites "a top housing having a top rim coupled circumferentially to the external bottom side of said vessel...". In this regard the Examiner has said that

the '305 reference shows "a top housing (16) having a top rim (53) coupled circumferentially to the external bottom side of the vessel (at 32, 53)...". The Examiner has thus relied on the definition of the "external bottom side of the vessel" to include the elements 32 and 53 rather than only the external bottom side 31 at the bottom end of the vessel 13. For the reasons discussed hereinabove, we believe this to be an improper and incorrect reading of the claim language.

In respect to the rejection of claim 152, which recites that the bottom housing is so configured and sized as to be temporarily placed in said vessel cavity in an upright position with its top rim facing said vessel top end, the Examiner has said that "since the diameter of the lower end rim (55) of the bottom housing (17) is less than the diameter of vessel outlet port (35) it is capable of being place in the vessel in the manner set forth in the claim". With this the applicants strongly disagree.

Even though the diameter of the lower end rim (55) is less than the diameter of the vessel outlet port (35), it does not follow that the bottom housing 17 can be placed in the vessel cavity, since the lower wall portion 33 is conically tapered and would not allow the bottom housing 17 to be placed therein in an upright position. For that reason, the bottom housing 17 is placed within the container 13 in an inverted position as will be seen in Fig. 4. For clarification purposes claim 152 has been amended to further distinguish over the '305 reference.

Claim 153 recites that the "burner fuel intake port is disposed at a lower end of said bottom housing so as to facilitate the coupling to a fuel source in a position below said bottom housing". In this regard, the Examiner has said that "in regard to claims 153 and 154, the fuel source and burner are formed as a single unit and supported by and at a lower bottom housing location (i.e. below the top rim (49))". Although this is true, the combination of the fuel source and burner are not located in a position below the bottom housing but are rather contained within the bottom housing as will be seen in Fig. 8. Clearly the burner fuel intake port is not coupled to a fuel source in a position below the bottom housing as recited.

For the reasons discussed hereinabove, the applicants believe that the Examiner has not shown that the cited reference teaches each and every element of the claims, as required. Accordingly, the applicants believe that claims 151-154 and 159 are not anticipated by the '305 reference and are therefore allowable thereover.

### **Section 103 Rejections**

Claims 106-116 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '305 reference in view of the newly cited GB000882881. Claims 117-149 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '305 reference in view of the '881 reference and DE3339848. Claims 156-158 and 160 are rejected under 35 U.S.C. 103(a) as being unpatentable over the '305 reference in view of FR2446097.

In response, the applicants have reviewed those references in detail and believe that the claims are patentable distinctive thereover for the reasons to be discussed hereinbelow.

According to the MPEP 2143, three basic criteria must be met to establish a prima facie case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. All of the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, MPEP 2143.03. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Claim 106 recites "a vessel having enclosed sides, a thermally conductive bottom end and a top end forming an opening for the introduction and extraction of contents to be heated, the bottom end having an external bottom side for receiving heat;... a top housing having a top rim coupled circumferentially to the external bottom

side of said vessel...". This is substantially the same language as claim 151, and the Examiner's remarks concerning the '305 reference as showing those features is substantially identical as discussed hereinabove. Accordingly, for the same reasons as discussed hereinabove, we believe that the recited features are neither shown nor suggested by the '305 reference.

Claim 106 also recites "a single thermally conductive member comprising a continuous piece of material fixedly attached to and positioned adjacent to and extending continuously along the entire extent of a peripheral edge of the external bottom side and having an inner peripheral edge defining an inner diameter and an outer peripheral edge defining an outer diameter, the conductive member having a plurality of undulating protrusions extending downwardly from the external bottom side".

The Examiner admits that the '305 reference does not show such a feature but says that the GB000882881 reference teaches "from applicants same portable heater field of endeavor, placing a single thermally conductive member (15) along the entire extent of a peripheral edge of the external bottom side".

Firstly, the applicants do not agree that this reference is in the "same portable heater field of endeavor" as the present invention. This reference describes a tea kettle which may be portable to the extent that it is moved to and from a stove but is not a self-contained, portable heating system which includes a heater with a top housing, bottom housing and a burner. Accordingly, we do not believe that the tea kettle design is necessarily in the same portable heater field of endeavor as suggested by the Examiner.

In respect to the rejections of claims 106-116, the Examiner has also said that "it would have been obvious to a person having ordinary skill in the art to modify US002154305 to include a single thermally conductive member (15) along the entire extent of a peripheral edge of the external bottom side in the manner set forth in applicants claims, in view of the teaching of GB000882881". With this, the applicants respectfully disagree.

It should be recognized that the '305 patent has been publicly available since 1939 and that the '881 has been publicly available since 1961. If the combination of the features of these two references were obvious to one skilled in the art, why has no one else (i.e. other than the present inventors), made such a combination in the last 45 years?

In the rejection of claims 117-149, the Examiner has combined the '305 reference with the '881 reference and also with DE3339848. In respect to the '305 and '881 references the discussion set forth hereinabove is applicable. In respect to DE3339848, the Examiner has said that reference "teaches (Figures 1 and 2), from applicants same portable heater field of endeavor dimension the outer perimeter diameter to be less than the diameter of the inner central cavity formed by the thermally conductive members, for the purpose of effectively directing heat from the burner flames into and along the heat transfer passage". The applicants respectfully disagree.

Unlike the present invention, which recites in claim 117

"a burner having a heat outlet... the heat outlet being generally round in form and having a fixed diameter..."

"a single thermally conductive member comprising a continuous piece of material fixedly attached to and positioned adjacent to and extending continuously along the entire extent of a peripheral edge of the surface and having an inner peripheral edge defining an inner diameter and an outer peripheral edge defining an outer diameter, with said inner diameter being greater than said fixed diameter, the conductive member having a plurality of undulating protrusion extending downwardly from the surface"

The '848 reference shows in Figures 1 and 2 a wire mesh structure that is contiguous with the walls of a vessel 12 and with an opening in the bottom, apparently for the insertion of the burner. Accordingly the recitation of "the outer burner diameter to be less than the diameter of the inner central cavity formed by the thermally conductive members" is not correct or appropriate from the structure shown. Further,

the diameter relationships are clearly not "for the purpose of effectively directing heat from the burner flames into and along the heat transfer passages" as recited.

In the rejection of claims 156-158 and 160 as being unpatentable over the '305 reference in view of FR2446097, the Examiner has said that the '305 reference shows and discloses the invention with the possible exception to

"an igniter portion disposed above the burner and a recess or indentation in the cover (15) for receiving or to accommodate the extending igniter portion; and friction or slot and dimple attachment means for upper and lower housing".


Although the '097 reference was said to teach the threaded fuel connection, it was not said to teach or suggest the features described hereinabove. Rather, the Examiner has relied on Official Notice "That it is well known to place igniter above, that is downstream of fuel exiting burner heads...". He went on to say that "Regarding any necessary recess or indentation in the cover for receiving or accommodate the extending igniter portion it is noted that the covers (23, 39, 40, 41) of US002154305 is formed with such a recess capable of performing this function". With this, the applicants respectfully disagree. Any such recess in those covers are provided for entirely different purposes and are clearly not provided for or adaptable to the purpose of accommodating the extending igniter portion.

For the reasons discussed hereinabove, the applicants believe that the Examiner has failed to establish a prima facie case of obviousness. For those reasons, the applicants believe that the claims are patentably distinctive over the cited references. A reconsideration of the Examiner's rejections and a passing of the case to issue is respectfully requested.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0289, under Order No. 1323\_001RCE01 from which the undersigned is authorized to draw.

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Respectfully submitted,

By 

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